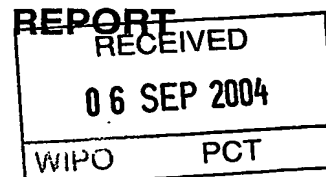


25 FEB 2006

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference PCT 1888HHBRon	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/09697	International filing date (day/month/year) 01.09.2003	Priority date (day/month/year) 30.08.2002
International Patent Classification (IPC) or both national classification and IPC E21B33/035		
Applicant COOPER CAMERON CORPORATION et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  27.02.2004	Date of completion of this report  03.09.2004
Name and mailing address of the International preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Ott, S  Telephone No. +49 89 2399-7429  

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/EP 03/09697**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-16 as originally filed

**Claims, Numbers**

1-32 as originally filed

**Drawings, Sheets**

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-32
Inventive step (IS)	Yes: Claims	
	No: Claims	1-32
Industrial applicability (IA)	Yes: Claims	1-32
	No: Claims	

2. Citations and explanations

**see separate sheet**

POINT V

V-1. D1: WO-0237008 discloses a rotating regulating device for the rotation and/or linear displacement of an actuating element of a valve, throttle, blowout preventer or similar, in particular in the field of gas or oil production (p.1, I.1-6), with a spindle drive (45) and a drive train (46) rotationally driving the spindle drive, the said drive train exhibiting at least one reduction gear unit (44) and a drive device (43) connected to it for movement, wherein the rotating spindle or nut of the spindle drive exhibits at least one engaging element (17) essentially protruding radially outwards, which engages guide slots (11-14), whereby a first guide slot (14) is fixed relative to a device housing and a second guide slot (12) can be rotated relative to the device housing and/or is supported for displacement in the longitudinal direction of the rotating spindle, whereby the guide slots exhibit at least different slopes in the longitudinal direction (p.9, I.9-11) of the rotating spindle and the movable guide slot is connected for movement to the actuating element (4).

The subject-matter of claim 1 does therefore not meet the requirements of novelty in the sense of Art. 33(2) PCT.

V-2. D1 also discloses the subject-matter of claim 2-13, 17, 29-30 and the subject-matter of said claims does therefore not meet the requirements of novelty in the sense of Art. 33(2) PCT.

V-3. D1 in combination with D2: US-5370011 disclose the subject-matter of claims 14-16, 22, 31, 32 since D2 discloses the use of both a harmonic drive and a position sensor.

D1 in combination with D3: US-5497672 discloses the subject-matter of claims 18-21, 23, 24.

D1 in combination with D4: DE-3607899 discloses the subject-matter of claim 25-28 since D4 discloses the use of of several drive shafts.

V-4. The subject-matter of claims 15-23 and 32 does not meet the requirements of clarity in the sense of Art. 6 PCT. Said claims are dependent claim any of the previous claims and mention features (such as the harmonic drive, claim 15) which have not been previously introduced (harmonic drive only mentioned in claim 14).

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/EP03/09697

V-5. Following defect is pointed out:

Rule 6.3b)i) and ii) PCT: incorrect two part form of independent claim with regard to D1.